



(U) Planning for Tomorrow's Overhead SIGINT Systems

FROM: [REDACTED]
Spaceborne Planning (S3331)
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(S) *Designing the next generation of collection satellites*

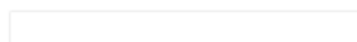
(S) NSA is leading an effort within the Intelligence Community to define the mission capabilities for the Next Generation Overhead SIGINT (NGOS) system that would be a fully integrated component of the transforming SIGINT system. This system would replace the Integrated Overhead SIGINT Architecture (IOSA), which is currently being deployed and will reach its full operational capability around 2010. The NGOS mission capabilities we are defining will influence satellite acquisitions post-2010, and ground-processing capabilities potentially much sooner, for a system that would be operational from 2012 through 2030.

(S) **To get to NGOS, we need to build a community consensus about what is buildable, affordable, and desirable.** The first step was the Unconstrained Operational Requirements for Overhead SIGINT Document (URD), a community-vetted document that defined high-level SIGINT capabilities that overhead could potentially address. The NRO used the URD as the basis for several studies (e.g., Next Generation IOSA (NGI), Next Generation Ground (NGG), and a Technology Investment Roadmap) that looked at what is buildable, based on current or projected technology.

(S) Now it's the community's turn to digest this data, weigh the cost-benefit of various alternatives, and produce a realistic NGOS mission capabilities set. This latter task is the role of the Mission Satisfaction Analysis Panel. The panel's end product is a mission capabilities set that, in the form of an NGOS Capability Development Document (CDD), will be vetted through the highest capability and requirement validation authorities in the DoD and IC: the Joint Staff's Joint Requirements Oversight Council (JROC) and the Office of the Director of National Intelligence's (ODNI) Mission Requirements Board (MRB).

(S) In March 2005, the NSA SIGINT Director kicked off the NGOS Mission Satisfaction Analysis. **A team representing 21 organizations is bringing a broad community perspective to the task.** They are tackling the hard questions: what are our priorities for Overhead in the future, what is the best future role of Overhead SIGINT within the broader spectrum of intelligence collectors, what kind of Overhead architecture can we afford and how much risk can we accept in getting there? NSA's Office of Overhead (S333) and SIGINT Acquisition and Capabilities (S01R) are leading this effort.

(S) What are we looking for from NGOS? None of us is clairvoyant. Although community futures studies and technology projections help us understand some of the possibilities, we are still planning for a world we cannot visualize with confidence. What we do know is that the worldwide SIGINT mission, the increasingly complex signal environment, and the unpredictability of crisis, demands robust and versatile collection capabilities. **Expect agility and flexibility to be a prime focus for NGOS.**



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